



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/928,024

08/10/2001

Charles A. Eldering

T741-10

5199

27832

7590

05/22/2006

TECHNOLOGY, PATENTS AND LICENSING, INC./PRIME
2003 SOUTH EASTON RD
SUITE 208
DOYLESTOWN, PA 18901

EXAMINER

VAN BRAMER, JOHN W

ART UNIT

PAPER NUMBER

3622

DATE MAILED: 05/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/928,024	Applicant(s) ELDERING ET AL.	
	Examiner John Van Bramer	Art Unit 3622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-81 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-81 is/are rejected.
- 7) ☒ Claim(s) 72-81 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>92304 82404 82304</u> . | 6) <input checked="" type="checkbox"/> Other: <u>IDS 081402</u> . |

DETAILED ACTION

Claim Objections

1. The numbering of claims is not in accordance with 37 CFR 1.126. The application was filed with duplicate Claims 72. Claims 72 (Second instance) through 80 have been renumbered claim 73 through 81 as per 37 CFR 1.126. Any newly submitted claims should begin with claim 82. Amendments should correct the claim numbering. Claims 1 – 81 are pending.

Claim Rejections - 35 USC § 102

2 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3 Claims 1-8, 10-24 and 67-75 are rejected under 35 U.S.C. 102(b) as being anticipated by Herz et al (U.S. Patent Number: 5,754,939).

Claim 1. Herz discloses a method for matching advertisements to subscribers, the method comprising:

a. Receiving advertisement profiles that include traits associated with an intended target market for an associated advertisement. (Col 6, lines 1 – 33)

- b. Gathering subscriber data from at least one source, wherein the subscriber data is selected from at least a subset of transactional data, public data, private data, and demographic data. (Col 5, lines 5 – 30)
- c. Generating subscriber profiles based on at least a subset of gathered subscriber data, wherein the subscriber profiles predict traits about the subscribers without revealing any private data or raw transaction data associated with the subscribers. (Col 5, lines 36 – 56)
- d. Correlating the advertisement profiles with the subscriber profiles. (Col 40, lines 9 – 28)
- e. Selecting targeted advertisements based on said correlating. (Col 40, lines 28 – 38)

Claim 2. Herz discloses the method of claim 1, further comprising grouping subscribers having similar subscriber profiles. (Col 23, line 43 – Col 24, line 21)

Claim 3. Herz discloses the method of claim 2, further comprising generating a group profile by averaging the subscriber profiles for all subscribers within the group, and wherein said correlating includes correlating the group profiles with the advertisement profiles. (Col 23, line 43 – Col 24, line 21 and Col 40, lines 9 – 28)

Claim 4. Herz discloses the method of claim 1, wherein said correlating includes

forming subscriber groups for at least a subset of the advertisement profiles, each subscriber group including subscribers whose subscriber profiles are most similar to a respective advertisement profile. (Col 23, line 43 – Col 24, line 21 and Col 40, lines 9 – 28)

Claim 5. Herz discloses the method of claim 1, wherein said gathering includes monitoring subscriber viewing activities. (Col 5, lines 5 – 30)

Claim 6. Herz discloses the method of claim 5, wherein said generating includes aggregating the subscriber viewing activities to develop subscriber viewing characteristics. (Col 23, line 43 – Col 24, line 21)

Claim 7. Herz discloses the method of claim 5, wherein the subscriber viewing activities include at least some subset of channel changes, volume commands, record commands and EPG commands. (Col 11, lines 17 – 51)

Claim 8. Herz discloses the method of claim 6, wherein the subscriber viewing characteristics include at least some subset of program preference, network preference, genre preference, volume preference, dwell time, and channel change frequency. (Col 10, lines 25 – 60)

Claim 10. Herz discloses the method of claim 5, wherein said generating includes

retrieving heuristic rules associated with the subscriber viewing activities; and applying the heuristic rules to the subscriber viewing activities to generate the subscriber profiles, wherein the subscriber profiles predict traits about the subscriber not captured in the subscriber viewing activities. (Col 19, lines 8 – 32)

Claim 11. Herz discloses the method of claim 6, wherein said generating further includes retrieving heuristic rules associated with the subscriber viewing characteristics; and applying heuristic rules to the subscriber viewing characteristics to generate the subscriber profiles, wherein the subscriber profiles predict traits about the subscriber not captured in the subscriber viewing characteristics. (Col 19, lines 8 – 32)

Claim 12. Herz discloses the method of claim 6, wherein said generating further includes retrieving heuristic rules associated with the subscriber viewing activities and the subscriber viewing characteristics; and applying the heuristic rules to the subscriber viewing activities and the subscriber viewing characteristics to generate the subscriber profiles, wherein the subscriber profiles predict traits about the subscriber not captured in the subscriber viewing activities or the subscriber viewing characteristics. (Col 19, lines 8 – 32)

Claim 13. Herz discloses the method of claim 1, wherein the subscriber profiles include probabilistic demographic traits of the subscribers. (Col 28, lines 9 – 40)

Claim 14. Herz discloses the method of claim 1, wherein said generating includes retrieving heuristic rules associated with transactional data gathered for the subscribers, wherein the heuristic rules identify traits likely associated with the subscribers performing those transactions. (Col 20, lines 15 – 63)

Claim 15. Herz discloses the method of claim 14, wherein the heuristic rules identify traits not readily identifiable with the transaction data. (Col 20, lines 15 – 63)

Claim 16. Herz discloses the method of claim 14, wherein the heuristic rules identify demographic traits. (Col 20, lines 15 – 63 and Col 28, lines 9 – 40)

Claim 17. Herz discloses the method of claim 1, wherein said gathering includes gathering information from a plurality of distributed databases. (Col 30, lines 54 – 63)

Claim 18. Herz discloses the method of claim 17, wherein the plurality of distributed databases includes at least some subset of viewing characteristics, purchasing characteristics, transaction characteristics, statistical information and deterministic information. (Col 23, line 43 – Col 24, line 21)

Claim 19. Herz discloses the method of claim 1, wherein said generating includes generating subscriber profiles in the form of a ket vector. (Col 12, lines 53 – 58)

Claim 20. Herz discloses The method of claim 19, wherein the ket vector is represented by: $|A\rangle = (a_1p_1 + \dots + a_np_n) + \dots + (m_1w_1 + \dots + m_nw_n)$ wherein a_1 through m_n represent weighting factors and p_1 through w_n are identification factors selected from at least a subset of viewing characteristics, purchasing characteristics, transaction characteristics, statistical information and deterministic information. (Col 15, line 62 through Col 17, line 5 and Col 23, line 43 through Col 24, line 21)

Claim 21. Herz discloses the method of claim 19, wherein said correlating includes applying an operator to the subscriber profiles to determine if an advertisement is applicable to associated subscribers. (Col 18, lines 39 – 67)

Claim 22. Herz discloses the method of claim 1, wherein said correlating is performed by a secure correlation server. (Col 45, line 38 through Col 46, line 27)

Claim 23. Herz discloses the method of claim 1, wherein said correlating is done by each subscriber. (Col 17, lines 20 – 33)

Claim 24. Herz discloses the method of claim 1, further comprising presenting the targeted advertisements to the subscribers. (Col 40, lines 29 – 34)

Claim 67. Herz discloses a system for targeting ads to one or more subscribers in a privacy protected manner, the system comprising:

- a. One or more databases storing information about subscribers, wherein the information includes at least a subset of transaction data, public data, private data, and demographic data (Col 23, line 43 through Col 24, line 21)
- b. A secure profiling server for generating at least one profile for the subscribers based on at least a subset of information stored in the one or more databases, wherein the subscriber profiles predict traits about the subscribers without revealing any private data or raw transaction data associated with the subscribers. (Col 39, lines 6 – 47)
- c. A secure correlation server for correlating the subscriber profiles with advertisement profiles and selecting targeted advertisements based on said correlating. (Col 40, lines 4 – 34)

Claim 68. Herz discloses the system of claim 67, wherein said secure profiling server also forms groups of subscribers having similar profiles. (Col 39, lines 6 – 47, and Col 40, lines 4 – 34)

Claim 69. Herz discloses the system of claim 68, wherein said secure profiling

server also generates group profiles by averaging the subscriber profiles for all subscribers with a group. (Col 39, lines 6 – 47, and Col 40, lines 4 – 34)

Claim 70. Herz discloses the system of claim 67, wherein said secure correlation server also forms groups of subscribers having profiles similar to the advertisement profiles. (Col 39, lines 6 – 47, and Col 40, lines 4 – 34)

Claim 71. Herz discloses the system of claim 67, further comprising a viewing characteristics and profiling system for monitoring subscriber viewing activities, aggregating the viewing activities to generate viewing characteristics and storing the viewing characteristics in one of the one or more databases. (Col 5, lines 5 – 30)

Claim 72. Herz discloses the system of claim 71, wherein said viewing characteristics and profiling system also applies heuristic rules associated with the viewing characteristics to generate a subscriber profile that predicts traits about the subscriber that are not captured in the viewing characteristics. (Col 19, lines 8 – 32)

Claim 73. Herz discloses the system of claim 67, wherein said secure profiling server generates the profiles for the subscribers in the form of a ket vector. (Col 12, lines 53 – 58)

Claim 74. Herz discloses the system of claim 73, wherein the ket vector is represented by: $|A\rangle = (a_1p_1 + \dots + a_np_n) + \dots + (m_1w_1 + \dots + m_nw_n)$ wherein a_1 through m_n represent weighting factors and p_1 through w_n are identification factors selected from at least a subset of viewing characteristics, purchasing characteristics, transaction characteristics, statistical information and deterministic information. (Col 15, line 62 through Col 17, line 5 and Col 23, line 43 through Col 24, line 21)

Claim 75. Herz discloses the system of claim 67, further comprising an advertisement insertion server for inserting at least one ad in place of each default ad in program streams to generate at least one presentation stream. (Col 22, lines 17 - 36)

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 53 – 66 and 76 - 81 are rejected under 35 U.S.C. 102(e) as being anticipated by Hendricks et al. (U.S. Patent Number: 6,463,585).

Claim 53. Hendricks discloses a method for targeting advertisements to subscribers of a television delivery system, wherein the targeted advertisements are presented in advertisement opportunities within television program streams, the method comprising

- a. Monitoring subscriber interactions with a television. (Col 20, lines 4 – 36)
- b. Aggregating the monitored subscriber interactions to generate viewing characteristics that identify traits associated with the subscribers but do not identify raw interaction data. (Col 21, lines 8 – 18)
- c. Predicting subscriber traits not related to the subscriber interactions with the television by applying heuristic rules associated with the viewing characteristics. (Col 35, lines 16 – 28)
- d. Creating subscriber profiles by combining at least some subset of the viewing characteristics and the subscriber traits. (Col 20, lines 4 – 35 and Col 29, lines 6 – 32)
- e. Receiving advertisement profiles that identify traits and characteristics of an intended target market of associated advertisements and a minimum correlation threshold. (Col 37, lines 13 – 33)
- f. Correlating the advertisement profiles and the subscriber profiles. (Col 37, lines 34 – 43)
- g. Identifying the subscribers meeting the correlation threshold for each of the associated advertisements as a target group. (Col 39, lines 50 – 57)

- h. Targeting the associated advertisements to the target groups. (Col 39, lines 50 – 57)

Claim 54. Hendricks discloses the method of claim 53, wherein the predicted subscriber traits include demographic traits. (Col 5, lines 52 – 67)

Claim 55. Hendricks discloses the method of claim 53, further comprising gathering additional subscriber characteristics from at least one external database, and wherein said creating subscriber profiles includes creating subscriber profiles by combining at least some subset of the viewing characteristics and the subscriber traits with at least some subset of the additional subscriber characteristics. (Col 26, lines 42 – 53)

Claim 56. Hendricks discloses the method of claim 55, wherein said additional subscriber characteristics include at least a subset of purchasing and transaction characteristics. (Col 20 lines 4 – 36)

Claim 57. . Hendricks discloses the method of claim 53, further comprising gathering additional subscriber traits from at least one external database, and wherein said creating subscriber profiles includes creating subscriber profiles by combining at least some subset of the viewing characteristics and the subscriber traits with at least some subset of the additional subscriber traits. (Col 26, lines

42 – 53)

Claim 58. Hendricks discloses the method of claim 57, wherein said additional subscriber traits include at least a subset of demographic and interest traits. (Col 26, lines 42 – 53)

Claim 59. . Hendricks discloses the method of claim 53, further comprising gathering deterministic information about subscriber traits and characteristics from the subscribers via questionnaires or surveys, and wherein said creating subscriber profiles includes creating subscriber profiles by combining at least some subset of the viewing characteristics and the subscriber traits with at least some subset of the deterministic information. (Col 26, lines 42 – 53)

Claim 60. . Hendricks discloses the method of claim 53, further comprising generating a node profile by averaging the subscriber profiles for each subscriber connected to the node; and wherein said correlating includes correlating the advertisement profiles and the node profiles; and said identifying the subscribers includes identifying the nodes meeting the correlation threshold for each of the associated advertisements as a target group. (Col 37, lines 34 – 43, and Col 39, lines 50 – 57)

Claim 61. . Hendricks discloses a method for forming groups of subscribers

within a television delivery system for the purpose of receiving targeted advertisements within advertisement opportunities in television program streams, the method comprising

- a. Retrieving demographic information for subscribers. (Col 26, lines 14 – 30, and Col 37, lines 13 – 33)
- b. Associating the demographic information of the subscribers with particular nodes of the television delivery system. (Col 37, lines 36 – 44)
- c. Creating a demographic profile of the nodes by averaging the demographic information for each subscriber connected to the node. (Col 38, lines 16 – 48)
- d. Grouping the nodes based on a correlation associated with the demographic node profiles. (Col 38, lines 16 – 48)

Claim 62. . Hendricks discloses the method of claim 61, wherein said grouping includes correlating each demographic node profile with each of the other demographic node profiles and combining the nodes having the most similar correlation into groups. (Col 26, lines 54 – 67)

Claim 63. . Hendricks discloses the method of claim 61, wherein said grouping includes correlating each demographic node profile with at least one advertisement profile and combining the nodes having the most correlation with each of the at least one advertisement profiles into groups. (Col 38, lines 16 – 48)

Claim 64. Hendricks discloses the method of claim 61, further comprising

- a. Retrieving characteristic information about the subscribers. (Col 20, lines 4 – 35)
- b. Associating the characteristic information for the subscribers with the nodes of the television delivery system. (Col 20, lines 4 – 35)
- c. Creating a characteristic profile of the nodes by averaging the characteristic information for each subscriber connected to the node. (Col 29, lines 6 – 32; and Col 39, lines 58 – 65)
- d. Creating overall node profiles as an aggregation of at least some subset of the node characteristic profiles and the node demographic profiles (Col 29, lines 6 – 32; and Col 39, lines 58 – 65)
- e. Wherein said grouping the nodes includes grouping the nodes based on a correlation associated with the overall node profiles. . (Col 29, lines 6 – 32; and Col 39, lines 58 – 65)

Claim 65. . Hendricks discloses the method of claim 64, wherein said retrieving characteristic information about the subscribers includes monitoring subscriber interactions with a television; and aggregating the monitored subscriber interactions to generate viewing characteristics that identify traits associated with the subscribers but do not identify raw interaction data. . (Col 29, lines 6 – 32; and Col 39, lines 58 – 65)

Claim 66. Hendricks discloses the method of claim 64, wherein the characteristic information includes at least some subset of viewing characteristics, purchase characteristics and transaction characteristics. . (Col 29, lines 6 – 32; and Col 39, lines 58 – 65)

Claim 76. Hendricks discloses an apparatus, coupled to a television, for presenting targeted advertisements to a subscriber on the television, the apparatus comprising:

- a. Memory. (Col 15, lines 13 – 23)
- b. An interface to a television network. (Col 15, lines 1 – 12)
- c. A profile processor capable of monitoring subscriber interactions with the television. (Col 34, lines 39 – 39)
- d. Aggregating the monitored subscriber interactions to generate viewing characteristics that identify traits associated with the subscriber but do not identify raw interaction data. (Col 20, lines 4 – 36)
- e. Creating a subscriber profile by combining at least some subset of the viewing characteristics with subscriber traits. (Col 44, lines 7 – 58)
- f. A correlation processor capable of correlating ad profiles for the subscriber profile. (Col 18, lines 20 – 32 and Col 58, lines 8 – 23)

- g. Selecting an appropriate advertisements based on the correlation. (Col 18, lines 20 – 32 and Col 58, lines 8 – 23)

Claim 77. Hendricks discloses the apparatus of claim 76, wherein said profile processor is further capable of predicting subscriber traits not related to the subscriber interactions with the television by applying heuristic rules associated with the viewing characteristics. (Col 18, lines 20 – 32 and Col 58, lines 8 – 23)

Claim 78. Hendricks discloses the apparatus of claim 76, wherein said interface receives multiple presentation streams and ad profiles associated with the advertisements within the presentation streams, and said correlation processor selects the appropriate presentation stream. (Col 18, lines 20 – 32 and Col 58, lines 8 – 23)

Claim 79. Hendricks discloses the apparatus of claim 76, wherein said interface receives advertisements and ad profiles on a separate channel, said correlation processor determines which ads are applicable, and said memory stores the applicable ads. (Col 18, lines 20 – 32 and Col 58, lines 8 – 23)

Claim 80. Hendricks discloses the apparatus of claim 76, wherein said interface receives targeted advertisements on a separate channel, said memory stores the targeted ads, and further comprising an ad inserter for inserting the targeted ads.

(Col 18, lines 20 – 32 and Col 58, lines 8 – 23)

Claim 81. Hendricks discloses the apparatus of claim 80, wherein said inserter can insert the targeted ads within live broadcasts or recorded programming. (Col 18, lines 20 – 32; Col 49, lines 46 – 65; and Col 58, lines 8 – 23)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 9, 25 – 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herz et al (U.S. Patent Number: 5,754,939) in view of Hendricks et al. (U.S. Patent Number: 6,463,585).

Claim 9. Herz discloses the method of claim 8. While, Herz is silent with regard to using “day part” as a subscriber viewing characteristic, the analogous teachings of Hendricks specifically include “day part” as a subscriber viewing characteristic used in targeting advertisements to television viewers (Hendricks, Col 69, lines 18 – 46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include “day part” as a subscriber viewing characteristics in the invention of Herz. One would have been motivated to do so in order to make sure that “specific advertisements are aired during television programming that is being viewed by those individuals most likely be influenced to buy the advertised product, or otherwise respond in the desired fashion to the advertisement.” (Hendricks: Col 3, lines 13 – 17)

Claim 25. Herz discloses the method of claim 24. While Herz discloses presenting targeted advertisements to users, he does not specifically state that these targeted advertisements are presented in “avails” (television breaks within the main program) within program streams. However, the analogous art of Hendricks discloses presenting targeted advertisements within breaks in the main program (Hendricks: Col 4, lines 25 – 42). It would have been obvious to

one of ordinary skill at the time the invention was made that utilizing the invention of Herz in a television broadcast medium would require that the targeted advertisements be placed within the "avails" of the broadcast. One would have been motivated to do this in order to ensure that the advertisements were displayed during normal interruption of the broadcast event.

Claim 26. Herz and Hendricks disclose the method of claim 25. While Herz discloses presenting targeted advertisements to users, he does not specifically state that these targeted advertisements are presented in video program streams. However, the analogous art of Hendricks discloses presenting targeted advertisements in video streams (Hendricks: Col 4, lines 25 – 42). It would have been obvious to one of ordinary skill at the time the invention was made that utilizing the invention of Herz in a television broadcast medium would require that the targeted advertisements be placed within video streams. One would have been motivated to do this in order to provide targeted advertisements to individuals "without requiring the user to expend an excessive amount of time and energy" (Herz, Col 4, lines 28 – 32).

Claim 27. Herz and Hendricks disclose the method of claim 26, While Herz discloses presenting targeted advertisements to users, he does not specifically state that these targeted advertisements are presented in television program streams. However, the analogous art of Hendricks discloses presenting targeted

advertisements in television program streams (Hendricks: Col 4, lines 25 – 42).

It would have been obvious to one of ordinary skill at the time the invention was made that utilizing the invention of Herz in a television broadcast medium would require that the targeted advertisements be placed within television program streams. One would have been motivated to do this in order to provide targeted advertisements to individuals “without requiring the user to expend an excessive amount of time and energy” (Herz, Col 4, lines 28 – 32).

Claim 28. Herz and Hendricks disclose the method of claim 25. While Herz discloses presenting targeted advertisements to users, he does not specifically state that these targeted advertisements are presented in video program streams. However, the analogous art of Hendricks discloses presenting targeted advertisements in video streams and generating and delivering, in addition to a default advertisement, multiple presentations streams for delivery of additional targeted advertisements (Hendricks: Col 4, lines 25 – 42). It would have been obvious to one of ordinary skill at the time the invention was made to use multiple presentation streams for delivery of targeted content. One would have been motivated to do so in order to make sure that “specific advertisements are aired during television programming that is being viewed by those individuals most likely be influenced to buy the advertised product, or otherwise respond in the desired fashion to the advertisement.” (Hendricks: Col 3, lines 13 – 17)

Claim 29, Claim 30, and Claim 31. Herz and Hendricks disclose the method of claim 28, While Herz discloses presenting targeted advertisements to users, he does not specifically state that these targeted advertisements are presented in video program streams via a cable television head-end. However, the analogous art of Hendricks discloses that one or more presentation streams are sent from the cable television head-end to the set top box, and that advertisement insertion is performed at either location (Hendricks: Col 4, 25 – 42, Col 11, lines 55 – 61). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to generate at least one presentation stream at a cable television head-end. One would have been motivated to do this in order to provide a user with a television program containing targeted advertisement. Without sending at least one program stream from the head end, there would be nothing for the user to watch.

Claim 32. Herz and Hendricks disclose the method of claim 31, wherein each node receives only a single targeted presentation stream for each program stream. (Hendricks: Col 12, lines 20 – 30 and Col 27, lines 20 – 27)

Claim 33. Herz and Hendricks disclose the method of claim 29, further comprising grouping nodes having similar profiles together to form a node cluster, and wherein said delivering includes delivering each node within the node cluster the same presentation stream. (Hendricks: Col 27, lines 1 – 6, and

Col 27, lines 63 – 67)

Claim 34. Herz and Hendricks disclose the method of claim 34, wherein said grouping nodes is not restrained by geographic proximity. (Hendricks: Col 26, lines 54 – 67)

Claim 35. Herz and Hendricks disclose the method of claim 33, further comprising generating a node profile by averaging the subscriber profiles for each subscriber connected to the node. (Hendricks; Col 35, lines 16 – 65)

Claim 36. Herz and Hendricks disclose the method of claim 29, wherein said delivering includes delivering multiple presentation streams associated with a single program stream to each node connected to the head-end, selecting the appropriate presentation stream for each node, and delivering the appropriate presentation stream to the subscribers connected to each node. (Hendricks: Col 26, lines 14 – 30, and Col 54, lines 51 – 67)

Claim 37. Herz and Hendricks disclose the method of claim 36, wherein said delivering multiple presentation streams includes delivering each of the multiple presentation streams at different frequencies, statistically multiplexed together at a single frequency, or at different wavelengths. (Hendricks: Col 12, lines 40 – 63, and Col 54, lines 51 – 67)

Claim 38. Herz and Hendricks disclose the method of claim 29, wherein said delivering includes delivering multiple presentation streams associated with a single program stream to each node connected to the head-end, selecting the appropriate presentation stream for each branch of each node, and delivering the appropriate presentation stream to the subscribers connected to each branch. (Hendricks: Col 26, lines 14 – 30, and Col 54, lines 51 – 67)

Claim 39. Herz and Hendricks disclose the method of claim 38, wherein said delivering multiple presentation streams includes delivering each of the multiple presentation streams at different frequencies, and said selecting includes mapping the frequency of the presentation streams to appropriate branches. (Hendricks: Col 13, lines 36 – 59, and Col 54, lines 51 – 67)

Claim 40. Herz and Hendricks disclose the method of claim 38, wherein said delivering multiple presentation streams includes delivering each of the multiple presentation streams statistically multiplexed together at a single frequency; and said selecting includes demodulating the statistically multiplexed presentation streams, routing the demodulated presentation streams, and modulating the routed presentation streams to appropriate branches. (Hendricks: Col 12, lines 40 – 63, Col 13, lines 36 – 59, and Col 54, lines 51 – 67)

Claim 41. Herz and Hendricks disclose the method of claim 38, wherein said delivering multiple presentation streams includes delivering each of the multiple presentation streams at a single frequency and different wavelengths; and said selecting includes demultiplexing the presentation streams and forwarding the different wavelength presentation streams to appropriate branches. (Hendricks: Col 54, lines 51 – 67)

Claim 42 Herz and Hendricks disclose the method of claim 28, wherein said generating at least one presentation stream is performed at a cable television node. (Hendricks: Col 18, lines 19 – 31)

Claim 43. Herz and Hendricks disclose the method of claim 28, wherein said delivering includes delivering, to each subscriber, a single targeted presentation stream for each program stream. (Hendricks: Col 27, lines 16 – 38)

Claim 44. Herz and Hendricks disclose the method of claim 28, wherein said delivering includes delivering, to each subscriber, a plurality of presentation streams for each program stream, and further comprising selecting the appropriate presentation stream for display to the subscriber. (Hendricks: Col 27, lines 16 – 38 and Col 27, lines 48 – 62)

Claim 45. Herz and Hendricks disclose the method of claim 24, wherein said

presenting the targeted advertisements includes delivering a plurality of targeted advertisements to each subscriber; and inserting the targeted advertisements within advertisement opportunities in delivered program streams. (Hendricks: Col 27, lines 16 – 38)

Claim 46. Herz and Hendricks disclose the method of claim 45, wherein said inserting includes inserting the targeted advertisements based on a queue. (Hendricks: Col 38, lines 16 – 48)

Claim 47. Herz and Hendricks disclose the method of claim 46, wherein the queue is delivered to the subscriber. (Hendricks: Col 34, lines 39 – 59)

Claim 48. Herz and Hendricks disclose the method of claim 47, further comprising storing the targeted advertisements and the queue. (Hendricks: Col 34, lines 39 – 59)

Claim 49. Herz and Hendricks disclose the method of claim 48, wherein a PVR receives the program streams, the targeted advertisements, and the queue, stores the targeted advertisements and the queue, and inserts the targeted advertisements in the program streams based on the queue. (Hendricks: Col 14, line 66 through Col 15, line 12; and Col 34, lines 39 – 59)

Claim 50. Herz and Hendricks disclose the method of claim 24, wherein said presenting the targeted advertisements includes delivering a plurality of advertisements to each subscriber; delivering an advertisement profile for each of the plurality of advertisements; determining if each of the advertisements is applicable by correlating the associated advertisement profile with the subscriber profile, storing the applicable advertisements; inserting the applicable advertisements within advertisement opportunities in delivered program streams. (Hendricks: Col 27, lines 16 – 47, and Col 34, lines 39 – 68)

Claim 51. Herz and Hendricks disclose the method of claim 50, wherein said inserting includes inserting the applicable advertisements based on a queue. (Hendricks: Col 38, lines 16 – 48)

Claim 52. Herz and Hendricks disclose the method of claim 50, wherein said presenting the targeted advertisements is performed by a PVR. (Hendricks: Col 14, line 46 through Col 15, line 12; and Col 34, lines 39 – 59)

Conclusion

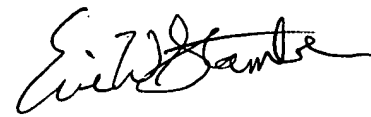
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kramer et al (U.S. Patent Number: 6,327,574) discloses the use of hierarchical models to develop consumer profiles and deliver target advertisements towards various groups.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Van Bramer whose telephone number is (571) 272-8198. The examiner can normally be reached on 9am - 5pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


jvb


ERIC W. STAMBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600